

HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Governmental Human Spaceflight Programs (Overview) (1)

Author: Dr. Michael Moloney
National Research Council, United States, mmoloney@nas.org

Mr. Alan Angleman
National Research Council, United States, aangleman@nas.edu

Dr. Sandra Graham
National Research Council, United States, sgrahman@nas.edu

FINDINGS AND RECOMMENDATIONS FROM US NATIONAL RESEARCH COUNCIL
COMMITTEE ON HUMAN SPACEFLIGHT

Abstract

Human spaceflight is considered by many to be the ultimate human endeavor in space—a pursuit to determine just how far human beings can venture into the cosmos and to understand what it is we will find and what we can do as a species in space. The U.S. National Research Council's Committee on Human Spaceflight was charged to examine carefully and thoroughly the rationale for and value of human spaceflight in as broad a context as possible. Whereas the financial benefit of the peaceful uses of outer space, such as using space-based assets for communication systems or weather prediction, might be clear and the scientific benefits of the robotic exploration of our cosmos might be compelling, understanding the extent to which the world needs or desires human spaceflight requires a much more nuanced and complex assessment. This paper will focus on this committee's assessment of these questions and describe the findings and recommendations of the committee's report—in particular, examining the long-term goals and direction of a sustainable future for human spaceflight. The report, which will be released in Spring 2014, examines the rationales and benefits of human spaceflight—in the context the needs of science, industry, international relations and partnerships, and the public good—and a sustainable pathway approach to human deep space exploration. The talk would present the committee's understanding of the rationales, pathways, and decision rules that could enable and guide future planning of human space exploration.

This US-NRC study was requested by the U.S. Congress and supported by the National Aeronautics and Space Administration (NASA). Conducted over 18 months, a committee of experts, drawn from diverse areas of expertise spanning the National Academies system, the study:

- Considered the goals for human spaceflight and the expected value of NASA's human spaceflight activities in the context of national goals,
- Solicited broadly-based, but directed, public and stakeholder input to understand better the motivations, goals, and possible evolution of human spaceflight,
- Considered how to identify a set of high-priority enduring questions that could provide the rationale for and value of human exploration in a national and international context, and
- Reviewed prior national and international studies and reports on human spaceflight.